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(71) Applicant (for all designated States except US): AGERE SYSTEMS INC. [US/US]; 1110 American Parkway NE, Allentown, PA 18109 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KOHLER, Ross, Alan [US/US]; 107 Aspen Drive, Allentown, PA 18104 (US). MCPARTLAND, Richard, Joseph [US/US]; 243 Heather Lane, Nazareth, PA 18064 (US). SINGH, Ranbir [US/US]; 8005 Monier Way, Orlando, FL 32835 (US).

(74) Agent: MASON, Kevin, M.; Ryan, Mason & Lewis, LLP, 1300 Post Road, Suite 205, Fairfield, CT 06824 (US).

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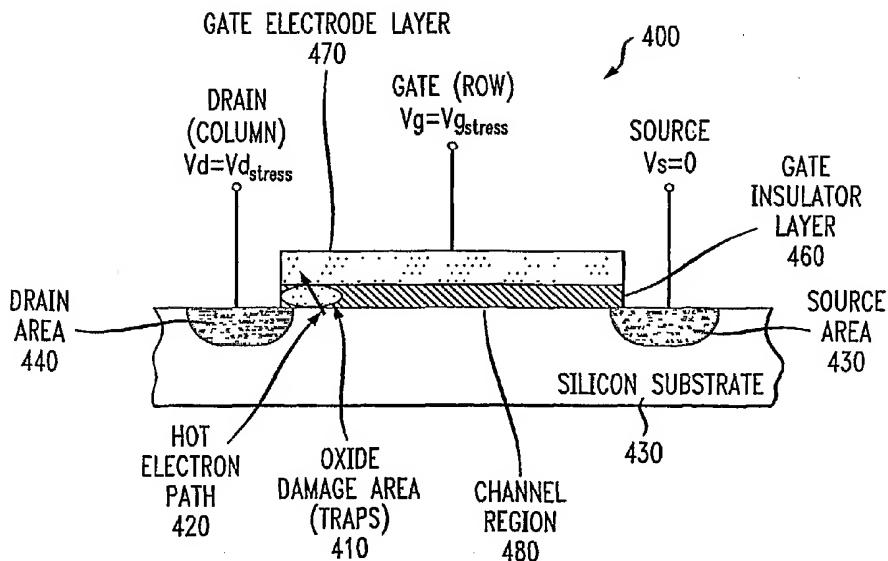
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(54) Title: METHOD AND APPARATUS FOR HOT CARRIER PROGRAMMED ONE TIME PROGRAMMABLE (OTP) MEMORY



(57) Abstract: One time programmable memory devices are disclosed that are programmed using hot carrier induced degradation to alter one or more transistors characteristics. A one time programmable memory device is comprised of an array of transistors. Transistors in the array are selectively programmed using hot carrier induced changes in one or more transistor characteristics, such as changes to the saturation current, threshold voltage or both, of the transistors. The changes to the transistor characteristics are achieved in a similar manner to known hot carrier transistor aging principles. The disclosed one time programmable memory devices are small and programmable at low voltages and small current.

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